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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,652	04/02/2004	Charles Frederick Lloyd	144382NV (15427US01)	3370
23446 7590 12/24/2008 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER				
WEATHERBY, ELLSWORTH				
ART UNIT		PAPER NUMBER		
3768				
MAIL DATE		DELIVERY MODE		
12/24/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

<b>Application No.</b> 10/817,652	<b>Applicant(s)</b> LLOYD ET AL.
<b>Examiner</b> ELLSWORTH WEATHERBY	<b>Art Unit</b> 3768

***--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

THE REPLY FILED 16 July 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Long V Le/  
Supervisory Patent Examiner, Art Unit 3768

Continuation of 11, does NOT place the application in condition for allowance because: Applicant has made not amendments to the claims which were rejected under the 06/26/2008 Final Rejection.

1. Responding to the Applicant's arguments regarding the Provisional Nonstatutory Obviousness-Type Double Patenting Rejection: The Examiner stands that the "provisional" double patenting rejection should continue to be made by the examiner as long as there are conflicting claims in more than one application. Applicant cites MPEP 804(I)(B)(1), which states that the provisional ODP rejection should be withdrawn when it is the only rejection remaining in the earlier filed application. That is, Applicant's arguments relying on MPEP 804(I)(B)(1) assume that the "provisional" nonstatutory obviousness-type double patenting rejection is the only rejection remaining on the present application. However, claims 1-4, 6-9 and 12-20 of the present application have all been rejected using prior art. Therefore, the Provisional Nonstatutory Obviousness-Type Double Patenting Rejection should still be made. The Examiner will support the prior art rejections below.

2. Responding to Applicant's arguments regarding the Rejection under 35 U.S.C 102(e): The Examiner stands that each and every element is set forth by Seeley. Applicant relies on the limitation, "to determine a variation based on deformity of the instrument" in the allegation that Seeley does not teach each and every element. However, claims 1-4, 6-9 and 12-20 do not exclude Seeley who teaches navigation including real-time tracking and modeling with dynamic calibration to assure a particular accuracy. That is, in known image guided systems the accuracy of the 3-D diagnostic data image sets is exploited to enhance the accuracy of operating room images, by matching these 3-D images to patterns appearing in navigation images; The system may require tracking and matching edge profiles of bones, morphologically deforming one image onto another to determine a coordinate transform (col. 2, ll. 9-65). Therein, is the limitation "determining a variation based on deformity of an instrument". More specifically, the examiner regards the coordinate transformations between the images and the tracking system of Seeley as including feedback based on a tracking system, where the feedback comprises comparing a tracked versus actual instrument position. Here, feedback uses a tracking system (T1 & T2) to update, or recalibrate, a modeled tool position in an image (col. 4, ll. 44-66). Seeley, goes on teaching a processor that computes the calibration as well as geometric distortion due to the imaging process, and converts the tracked or actual location of the tool to a distorted tool image position at which the display projects a representation onto the fluoroscopic image to guide the surgeon in tool navigation (col. 5, l. 1-14). This modeled tool position in Seeley is dynamically calibrated such that when the tool moves (or even if just the imaging axis changes) the processor would inherently recognize that the positional accuracy is no longer within the certain tolerance to achieve high position accuracy or tracking resolution and would determine the transformations and corrections (aka recalibrate the instrument position) that are required to accurately show the modeled tool in the new image (col. 9, ll. 26-40). The Examiner stands that in teaching identifying a distorted tool image, Seeley inherently teaches determining a variation based on a deformity (or altered shape) of the instrument based on the deformity. The causative basis of the deformity is neither claimed nor is it even within the scope of the body of the claims of the present application. Therefore, because the substantive body of claims 1-4, 6-9 and 12-20, their overall scope, regards real-time tracking and modeling with improved calibration to assure a particular accuracy, they are not patentable over Seeley in their present form. With Regard to Applicant's allegation that Seeley does not expressly teach or suggest a fiducial that includes an indentation or groove at col. 5, ll. 32-54, the Examiner stands that tracking mutual information, contour matching or other correlation procedure (col. 5, ll. 48-49), inherently teaches that an indentation or groove (see also col. 2, ll. 52-55).